

## CLAIMS

### Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

### Listing of claims:

31. (Original) A method of providing redundancy in a cable modem termination system (CMTS), comprising:  
passing communications through a directional coupler to a primary CMTS transceiver during a first operation mode; and  
passing the communications through the directional coupler to a backup CMTS transceiver during a second operation mode.
32. (Previously Presented) The method of claim 31, further comprising:  
testing the backup CMTS transceiver without disturbing the communications through the primary CMTS transceiver.
33. (Previously Presented) The method of claim 32, further comprising:  
testing the backup CMTS transceiver without removing the backup CMTS transceiver from the CMTS.
34. (Original) The method of claim 31, further comprising:  
entering the second operation mode upon detecting a failure of the primary CMTS transceiver.
35. (Original) A method of operating a cable modem termination system (CMTS), comprising:  
communicating with one or more primary CMTS transceivers across a primary signal path during a first operation mode, wherein each primary CMTS transceiver has

one or more upstream communication ports for communication with subscriber equipment and one or more downstream communication ports for communication with a head end, and wherein a directional coupler is connected between each upstream communication port and the subscriber equipment and between each downstream communication port and the head end;

detecting a failure of one of the primary CMTS transceivers; and

entering a second operation mode wherein communication with the failed primary CMTS transceiver is routed through a backup CMTS transceiver through the directional couplers associated with the failed primary CMTS transceiver.

36. (Original) The method of claim 35, further comprising:  
amplifying the communication through the backup CMTS transceiver during the second operation mode.
37. (Original) The method of claim 36, wherein the communication through the backup CMTS transceiver is amplified to compensate for losses through the directional coupler to create a signal with near unity gain.
38. (Original) The method of claim 37, further comprising:  
detecting a signal level of the communication through the backup CMTS transceiver; and  
adjusting the amplification based on the detected signal level to create the signal with near unity gain.
39. (Previously Presented) The method of claim 35, further comprising:  
testing the backup CMTS transceiver without disturbing the communications with the primary CMTS transceivers.

40. (Previously Presented) The method of claim 39, further comprising:  
testing the backup CMTS transceiver without removing the backup CMTS transceiver from the  
CMTS.